
MASSACHUSETTS
INSTITUTE
OLOGY

WORKING PAPER
ALFRED P. SLOAN SCHOOL OF MANAGEMENT

IMPERMANENT POWER, CONTESTED POWER: THE CIRCULATION OF CHIEF EXECUTIVE OFFICERS IN U.S. INDUSTRIAL CORPORATIONS, 1960-1990

Working Paper No. 3544-93

MASSACHUSETTS
INSTITUTE OF TECHNOLOGY
50 MEMORIAL DRIVE
CAMBRIDGE, MASSACHUSETTS 02139

IMPERMANENT POWER, CONTESTED POWER: THE CIRCULATION OF CHIEF EXECUTIVE OFFICERS IN U.S. INDUSTRIAL CORPORATIONS, 1960-1990

Working Paper No. 3544-93

William Ocasio

Assistant Professor of Strategy and Organization Studies
MIT Sloan School of Management
E52-562, 50 Memorial Drive
Cambridge, Massachusetts 02139
Tel.: (617) 253-8412 E-Mail: wocasio@sloan.mit.edu

March 1993

This paper is based on my doctoral dissertation research at Stanford University. An earlier, abridged version will appear in the *Academy of Management Best Papers Proceedings 1993*. I would like to thank Jeff Pfeffer, Bill Barnett, Jim March, Joel Podolny, Mauro Guillen, Paul Osterman and Marc Ventresca for invaluable advice, suggestions, and encouragement.

IMPERMANENT POWER, CONTESTED POWER: THE CIRCULATION OF CHIEF EXECUTIVE OFFICERS IN U.S. INDUSTRIAL CORPORATIONS, 1960-1990

Abstract

This paper develops a theoretical model of political dynamics, the circulation of power, and compares it to the model of institutionalization in an event history analysis of CEO succession. The model of circulation extends earlier theories of circulation of elites by Pareto, Mosca, and Michels. CEOs are subject to a liability of experience, as increased tenure and prior board experience increases their obsolescence and the contestation by rivals. The study of 225 succession events provides greater support for the model of circulation than for institutionalization. Contrary to conventional views, under economic adversity, more inside board members increases CEO succession.

INTRODUCTION

The concept of the business firm as a political coalition (March, 1962; Cyert and March, 1963) underlies a long stream of research that challenges unitary actor models and looks to the role of power in shaping firm behavior. According to political models of organization, firm behavior responds to the interests and beliefs of the dominant coalition. Chief executive officers (CEOs) of U.S. industrial corporations exert a central role in the dominant coalition, exercising their influence through both formal authority and their informal basis of power (Pfeffer, 1992). The ability of CEOs to exert and maintain their power determines their ability to control the dominant coalition and to shape the direction of the corporation.

Most research on power has implicitly or explicitly studied it as a static, or equilibrium process. For example, in structural contingency models power is obtained by the equilibrium alignment of the capabilities of individuals and subunits with the critical contingencies and resource dependencies in the environment (Hickson, Hinnings, Lee, Schneck, and Pennings, 1971; Pfeffer and Salancik, 1978). But if the concept of power is to have independent explanatory power (March, 1966), an equilibrium model will not suffice. If the composition of the dominant coalition is in constant alignment or equilibrium with the firm' s environment, power becomes an epiphenomenon, a mere reflection of structural contingencies and resource dependencies. If the power and interests of the CEO and the dominant coalition are to have independent explanatory force, the composition of the political coalition must become decoupled, over time, from the firm's environmental contingencies. Consequently, an understanding of the role of power and politics in shaping behavior requires that organizational theory and research focus not just on equilibrium processes, but on the underlying political

dynamics that determine the determination and maintenance of power of the CEO and the dominant coalition.

Contingency theories of power view CEO succession as a critical mechanism for aligning the firm's political coalition with its resource dependencies and critical contingencies (Pfeffer and Salancik, 1978; Tushman and Romanelli, 1985). Failures of economic performance serve as triggering devices for executive turnover, and for opportunities for realigning the firm with its critical contingencies. But most studies of executive succession have found that the effects of performance on succession are small (Weisbach, 1988; Fredrickson, Hambrick and Baumrin, 1988), nonexistent (Fizel, Louie, and Mentzer, 1990), or in some cases, that CEO turnover is actually preceded by abnormally good performance (Morck, Schleifer, and Vishny, 1989). The loose coupling of executive succession from the firm's economic performance suggests a role for CEO power in shaping firm behavior. Political dynamics offer an explanation for why poor economic performance often fails to trigger executive succession. To explore this hypothesis, this paper studies political dynamics in an event-history analysis of CEO succession in U.S. industrial corporations from 1960-1990. The analysis of CEO succession provides an opportunity for studying how political processes help to insulate executives from economic and environmental demands, and how these political processes change over the CEO's tenure.

The limited research on political dynamics has followed, for the most part, a model of institutionalization or power (Pfeffer, 1981; Boeker, 1989). According to this model, the power of executives becomes entrenched over time. This paper presents and develops an alternative model, that of circulation of power, where the power of executives decays over time, as it becomes subject to obsolescence and contestation. The model of circulation of power builds

upon early political theories of circulating elites developed by Mosca, Pareto, and Michels. But unlike most elite theories, the present formulation uses the concept of circulation to describe the continuing pattern of change and replacement of individual executives, rather than of elite groups. The empirical study compares and contrasts a set of alternative hypotheses from the two models of political dynamics in the context of individual CEO succession. The findings of the study provide greater support for the model of the circulation of power.

THEORY AND HYPOTHESES

This paper compares and tests two models of power in U.S. corporations: the model of institutionalization of power, and the model of circulation. These two models provide alternative conceptualizations of intraorganizational politics and of the ability of CEOs to develop and maintain stable and cohesive political coalitions that support their power base. The first model has been more prevalent in contemporary organizational theory (Salancik and Pfeffer, 1977; Pfeffer, 1981) and posits the ability of CEO's to build upon their power to entrench themselves and perpetuate their power. The second model highlights the contestation and impermanence of the CEO's power, and the increasing obsolescence of and opposition to his executive tenure in the corporation. This paper gives particular attention to the political dynamics of the CEO's power within the board of directors (Boeker, 1992).

1) Model of institutionalization of power. Pfeffer (1981) presents three underlying, interrelated processes that may lead to the institutionalization and perpetuation of power. First, an escalation of commitment to a course of action (Staw, 1976) may lead decision makers (e.g., boards of directors) to beliefs that sustain activities that have been selected (e.g., executive selection). Second, beliefs and practices associated with those in power may become

institutionalized (Selznick, 1957)[1], with the incumbent's actions acquiring the nature of "taken-for-grantedness, (Meyer and Rowan, 1977; Zucker, 1977) " with his[2] power not called into question. Third, incumbents may use their power to expend resources, make appointments, and establish networks of influence in ways that consolidate and perpetuate their power. The mechanisms at the disposal of the CEO to institutionalize and perpetuate their power include developing close, stable ties with existing board members and with corporate officers, influencing the selection of directors under his control, and exerting influence over subordinate officers that are also members of the board. These mechanisms suggest that the CEO's power is likely to increase over the period of his incumbency, and that appointments of board members serve to strengthen the CEO's influence over corporate decisions, and to insulate him from the pressures of economic performance.

The model of institutionalization is used to develop a set of hypotheses on the conditions that lead to greater entrenchment of the CEO's power. The institutionalization of power of the incumbent CEO in the corporate board of directors is directly related to **(a)** the length of tenure of the CEO, **(b)** prior tenure in the board of directors, **(c)** the proportion of directors appointed during his incumbency, and inversely related to **(d)** the proportion of outside directors. The power of the CEO will become most evident under conditions of economic adversity, as more

---

[1] In this paper, the concept of institutionalization is closest to that of Selznick (1957), which focuses on the role of executive leadership in attaining institutionalization within individual organizations. As such it differs from the new institutionalism in organizational sociology (Powell and DiMaggio, 1991), which highlights institutionalization processes occurring at the level of the organizational environment, and the organizational field.

[2] There are few female CEOs in U.S. industrial companies and none in this study's random sample. For convenience, I will use the masculine pronoun throughout this paper in all references to CEOs.

powerful CEOs will be able to use their sources of power to maintain their power and position within the corporation.

The focus on the institutionalization of the CEO's power within the board of directors is consistent with managerial control theories of organization (Berle and Means, 1967), and with approaches that view corporate boards of directors as "pawns" of management (Lorsch, 1989). A secondary objective of this paper is to use the two models of political dynamics to explore whether, how, and when CEOs exert their power over the board of directors, and inhibit the capacity of directors to realign the corporation with environmental contingencies. The model of institutionalization assumes that CEOs are able to extend their power over the boards through board appointments, by their control over insider directors, and by their prior network of contacts with board members before becoming CEOs.

2) Model of circulation of power. The model of circulation of power offers an alternative view of political dynamics in organizations, which highlights the political contests among members of top management, and the obsolescence of a CEO's power. It directly challenges the view that CEOs are able to entrench and perpetuate their power. It argues instead that power is likely to erode and dissipate over time. Powerful executives are subject to technical and political obstacles to the continuation of their power and to an increase in the number of enemies and rivals. As the organization faces changes in its environment, executive capabilities and programs will be called into question, rivals and enemies will emerge, and the likelihood is great that those in position of power will eventually lose their power (Pfeffer, 1992).

The circulation of power is created by the interplay of two underlying mechanisms: obsolescence and contestation. Chief executives develop strategies for matching problems,

solutions, and choice opportunities in organizational decision-making. When a new CEO takes over the formal control, new strategies and solutions gain ascendancy which alter the organization's alignment with its environment. But early choices made by CEOs tend to become stable and inert with decreasing fit between the CEO's strategies and programs and environmental contingencies. In a study of Canadian corporations, Miller (1991) found that the fit between environmental demands and organizational structures and strategies declined over the tenure of the CEO. CEOs become "stale in the saddle" over time, tied to their past policies and programs, and unable to adapt adequately to environmental contingencies. CEOs suffer from competency traps (Levitt and March, 1988) as their cognitive schemas are tied to skills and patterns of behavior that led to success in the past, but which are obstacles to understanding current environmental conditions. The resulting pattern of inertia in executive decisions leads to their technical obsolescence, as incumbent CEOs are increasingly unable to provide satisfactory solutions to organizational problems. As CEOs become technically obsolete, they may also become politically obsolete, with an increasing inability to control political conflict and to maintain stable and cohesive political coalitions. Schemas and practices that were effective in the past for gaining control over the political coalition may cease to be appropriate as the composition and interests of the coalition changes. Technical and political obsolescence leads to opposition to his tenure both within and outside the corporation and its board of directors.

According to the model of circulation, the obsolescence of the CEO's tenure is accompanied by a second force, the contestation of his power. Executive officers of the corporations are rivals for the CEO's power and position. Rather than seeing other top executives as directly controlled by the CEO, the model of circulation argues that other executive members

of the dominant coalition have interests independent from the CEO, and are potential rivals to his power and position. The degree of contestation is a function of the number of potential rivals to his power, both within the corporation and in its board of directors. With the ascendancy of CEOs to power and the emergence of new political coalitions, political struggles may become latent but are not eliminated. The power of the CEO and his coalition is always subject to contestation, with periods of political stability being only temporary interruptions of an underlying pulling and tugging of contestants for power, position, and privilege. With a more prolonged tenure for the CEO, and as his technical and political obsolescence increases, the latent conflicts and political contests may come to the foreground and the ability of the CEO to maintain a working political coalition may become threatened. Economic adversity provides a particularly fertile condition for triggering political contests. As the economic performance of a firm deteriorates, latent conflicts may become manifest, and the ability of the CEO to maintain his sources of power becomes threatened.

The model of circulation of power emphasizes the shifting political coalitions and the incessant political struggles prevalent in organizations. This model builds upon early political theories of circulating elites developed by Mosca, Pareto, and Michels. While organizations are ruled by political elites, or dominant coalitions, these "...elites do not last. Hence — the history of man is the history of the continuous replacement of certain elites: as one ascends, another declines (Pareto, 1968, p.36)." Michels (1962) extends Pareto's analysis by recognizing that ruling oligarchies are characterized by struggle among the leaders themselves: "...a spirit of general fraternity is conspicuously lacking; we do not see sincere and cordial mutual trust; there is a continual latent struggle, a spirit of irritation determined by the reciprocal mistrust of the

leaders (p. 176)." Instead of a simple replacement of one elite group by another, Michels argues for the process of amalgamation of power, with old elements intermixing with the new, and new elite members intermixing with existing ones. This conceptualization of elites and their circulation stresses intraelite conflict as a driving force for change (Putnam, 1976). It contrasts with the model of institutionalization of power, which stresses solidarity and cohesiveness among group members, with political change characterized by full replacement of existing elites, rather than by the amalgamation of existing elite members with new ones.

The model of circulation is used to derive a set of conditions under which greater impermanence and contestation of the executive's power is to be expected. The power of the CEO is contested and unstable and decays over time, as new coalitions emerge. The strength and stability of power of the incumbent CEO in the corporate board of directors is inversely related to **(a)** the length of tenure of the CEO, **(b)** prior tenure in the board of directors, **(c)** the number of directors.

The model of circulation of power provides a set of explanations that compete with the model of institutionalization regarding the effects of tenure and the political influence of the CEO. Given that political dynamics may insulate the CEO from the effects of economic adversity, the effects of political processes will interact with economic adversity to affect the rate of CEO succession. The two models of political dynamics are used to develop a set of hypotheses that compare and contrast the effects of tenure and the CEO's political influence. Given the emphasis on dynamic, disequilibrium process, all hypotheses are presented in terms of their effects on the rate of CEO succession. The interaction effects of economic adversity and

political variables will be highlighted, as the effects of CEO's power become more salient under conditions of adversity.

Hypothesis 1a: The length of tenure of the incumbent CEO will *decrease* the rate of CEO succession.

Hypothesis 1b: The length of tenure of the incumbent CEO will *increase* the rate of CEO succession.

The effects of duration, or length of tenure of the CEO, provides the first set of contrasting predictions under the two models. The institutionalization of power implies that length of tenure will result in a decreased rate of CEO succession. Increased tenure leads to an escalation of commitment to the CEO, a taken-for-grantedness of his power, and more resources having been expended in maintaining and perpetuating the CEO's power. The opposite prediction is associated with a model of circulation of power, which is characterized by the obsolescence of a CEO's programs and the impermanence of his power. Obsolescence is likely to increase over the duration of the CEO's tenure, with increased opportunities for latent opposition to come to the forefront and for the CEO's power to become openly contested.

Hypothesis 2a: Economic adversity will interact with the length of prior board tenure of the incumbent CEO to *decrease* the rate of executive succession.

Hypothesis 2b: Economic adversity will interact with the length of prior board tenure of the incumbent CEO to *increase* the rate of executive succession.

Prior board tenure measures the experience the CEO has had with the board before assuming the top executive position. Does prior experience increase the CEO's power? Or does prior board experience prove a liability, increasing the enemies of the CEO? This issue remains

unexplored in past studies of CEO succession. Again we find a case where the two models of CEO power yield opposite predictions. According to the model of institutionalization, prior board experience increases the opportunities for the CEO to expend resources, to build alliances, to increase group cohesiveness, and to increase the probability that his power can be maintained. According to the model of circulation, greater prior board experience serves to increase the technical and political obsolescence of the CEO, to provide opportunities to develop enemies and rivals for his power, and to expose him to a greater degree of contestation. CEOs with longer prior board tenure are more likely to be committed to past strategies and programs of the corporation, and less likely to undertake significant organizational change. CEOs with longer board tenures may suffer from a *liability of experience*, as increased exposure to the board increased their obsolescence and the probability of contestation.

Hypothesis 3: Economic adversity will interact with the proportion of directors appointed during the CEO's incumbency to *decrease* the rate of CEO succession.

CEO's may exert social influence through board appointments (Wade, O'Reilly, and Chandratat, 1991). One mechanism CEO's utilize to maintain and preserve their power is through the appointments of executives and board members more favorable to his position. While board members are nominated by the board itself and elected by shareholders, CEOs are typically most influential in their selection (Lorsch, 1989). The power of the CEO becomes more institutionalized as the proportion of board appointments he has made increases. In this instance no countervailing hypothesis is provided by the circulation of power model.

Hypothesis 4: Economic adversity will interact with the proportion of outside directors to *increase* the rate of CEO succession.

Both agency theory (Fama and Jensen, 1983; Weisbach, 1988) and the institutionalization of power model argue that outsiders are able to exert more independence from the CEO and limit his power. The supposition is that inside directors as part of the management team are more loyal to the CEO than outside directors, who have greater independence. The model of circulation of power would argue that both inside and outside directors serve as constraints on the CEO's power and would therefore reject Hypothesis 4. It does not necessarily imply the alternative hypothesis, that inside directors are less loyal to CEOs than outside directors, so no competing hypothesis other than the null hypothesis is presented.

Hypothesis 5: Economic adversity will interact with the number of directors to *increase* the rate of CEO succession.

The model of contested power and control highlights the limits, impermanence, and contestability of the CEO's power. The stability and cohesiveness of the governing coalition under the CEO can be best contested when there are a larger number of directors on the board. A larger board is more likely to be able to generate alternative political coalitions that can challenge the CEO, and take control over the corporation. A larger board also limits the possibility of the CEO exerting social influence to maintain a cohesive, stable coalition in the board to maintain his power. No competing hypothesis on board size is presented for the model of institutionalization of power.

METHOD

Sample. A random sample of 120 U.S. industrial corporations listed in the *Moody's Industrial Directory* for 1980 was selected for the analysis. The unit of observation is the company year, covering the years 1960-1990. Given lack of financial data for six of the

companies in the original sample, the sample was reduced to 114 companies. Not all companies had data for the complete period. Many were founded and/ or became publicly held after 1960. Many others merged, became bankrupt, went private, or otherwise ceased to be publicly held companies during the decade of the 1980s. The total sample used included 2,391 company-years of data.

The methodology implicitly treats bankruptcy, acquisition, and change to private ownership as competing risks to executive succession. This means, of course, that the effects being measured relate exclusively to normal forms of succession within the current ownership and organization of the firm. Succession due to acquisition or private ownership is treated as a competing risk which is excluded from the current analysis.

The sample was selected in 1980 to permit firms founded since 1960, including high-techology companies, to become part of the sample. This creates some sample selection bias as firms that died between 1960 and 1980 were excluded from the sample. While sample selection bias would have been eliminated if sampling had been undertaken in 1960, this would have excluded newer firms from the sample, and the resulting sample would have been less representative of existing firms. Sampling in 1980 was undertaken as a compromise solution that would reduce sample selection bias, at the same time that the sample would be more closely representative of industrial firms in 1990.

Independent variables and succession events. *CEO Turnover.* CEO succession events were coded from *Standard and Poor's Directory of Corporations, Officers, and Director's* based on changes in the names of the relevant officers. A total of 225 succession events was observed during the 2,391 company-years of data in the sample. *Performance.* Data on return on assets

(ROA), adjusted for industry averages, were obtained from COMPUSTAT. Return on assets was used as a performance measure given its widespread use in prior succession studies (Zajac, 1990). *Tenure*. This variable measures the number of years the incumbent serves as CEO, and is used to measure the duration of the CEO's tenure. To address the problem of left-censoring, prior CEO tenure is recorded for all incumbents in 1960, or for the first incumbent in the sample for each company, 10Ks, and proxy statements. *Prior Board Tenure*. The year when the CEO first joined the board of directors was recorded to obtain a measure of the CEO's board tenure before first becoming CEO. This variable is measured in logarithmic form. *Number of Directors*. This variable measures the number of board members, both insider directors and outside directors. *Proportion of Outside Directors*. This variable measures the number of outside board members divided by the total number of directors. *CEO Appointees*. This variable measures the proportion of all directors first appointed during the CEO's incumbency.

Control variables. *Age*. The age of the CEO during the current year. Age is expected to have a positive effect on the rate of CEO succession. *Size*. Measured as the logarithm of the number of employees as reported in COMPUSTAT. No specific effect of size is hypothesized. *Time Trend*. This variable measures the calendar years elapsed since 1960, and is intended to capture historical trends in the rate of CEO succession. A positive trend is expected, taking into account increased pressures on CEOs during the 1980's. *Founder*. A dummy variable coded as 1, if the CEO is the founding CEO, and 0 otherwise, is included in the analysis. This variable is expected to capture the differential power of a founding CEO, and is expected to have a negative effect on the rate of CEO succession.

Data sources. Data on performance and size were obtained from COMPUSTAT. All other data were obtained from *Standard and Poor's Directory of Corporations, Officers, and Directors,* and supplemented by proxy statements, 10Ks, and annual reports, and *Who's Who in Industry and Finance*. All variables, except financial and employment data were recorded at the beginning of the year. Financial and employment data used were lagged one fiscal year.

Modeling Procedure. I test the hypotheses by specifying continuous-time, event history analysis, estimated by maximum likelihood methods. The use of event history analysis for CEO succession is to be preferred to the more common method of using cross section analysis either for any given year or set of years, or alternatively, sampling only for the year of turnover. These last two methods are subject to specification bias, due to sample censoring, which can be particularly critical given the hypothesized vulnerability of newness for CEOs. Implicit in almost all past empirical models on the determinants of CEO succession is the assumption of equilibrium. A study of the effects of political dynamics on succession must explicitly account for the likelihood that adaptations to economic forces will not be instantaneous, and that an extended period of disequilibrium in adjustment may follow. The utilization of duration-dependent event history analysis provides an established methodology (Tuma and Hannan, 1984) for dealing with dynamic processes that has been almost unexplored in the CEO succession literature. The models are estimated using Rate (Tuma, 1980).

Several alternative specifications of duration-dependence were tested, including the exponential, Gompertz, and the Weibull models. Although the models are not nested, the chi-squares of the estimated Weibull models were significantly larger than the exponential or Gompertz, indicating a better statistical fit. Consequently, the Weibull model was used.

Table 1
Variables, Means, Standard Deviation, and Observed Range

Variables	Mean	Standard Deviation	Minimum	Maximum
Succession	0.090	0.29	0	1
Tenure	11.36	10.85	1	62.000
ROA	-0.58	8.16	-185.692	46.03
Age	57.4	9.18	33	1,290.000
Time Trend	15.72	7.65	0	30
Size (Log of Employees)	1.07	1.7	-5.81	5.438
Founder	0.21	0.41	0	1
Prior Board Tenure (Log)	1.25	1.14	0	3.555
Prop. Outside Directors	0.59	0.18	0	0.938
Prop. Dir. Appointed	0.67	0.39	0	1
Size of Board	10.07	3.31	2	22
Interaction of ROA with:				
Tenure	-46.77	662.4	-15783.8	3,175.9
Founder	0.08	2.94	-33.091.	24.27
Prior Board Tenure (Log)	-0.02	12.06	-195.43	75.37
Prop. Outside Directors	-0.44	5.09	-92.85	22.51
Prop. Dir. Appointed	-0.36	6.75	-185.69	46.03
Size of Board	-3.96	61.88	-742.77	275.16

Descriptive Statistics and Correlation Matrix

Table 1 presents the sample means, standard deviations, and the maximum and minimum values for the variables and interaction terms used in the analysis. The unit of observation is the company year. Table 2 presents the Pearson correlation coefficients, with the corresponding p-values. A succession variable that takes the value of 1 if a succession event occurs, and 0 otherwise is included for comparison. Note that the correlation between CEO succession and the adjusted return on assets measure is -0.06, with a p-value of .003. Note that the correlation between market return and succession is -0.0009, clearly not statistically significant, with a p-value of .966. Consequently, all reported hazard rate models will use return on assets as a measure of economic adversity.

An examination of the correlation matrix reveals a high degree of multicollinearity between the measures of economic performance and the multiplicative interactions of performance with other independent variables. The correlations between return on assets and its interactions with proportion of outside directors, proportion of directors appointed under the CEO's tenure, number of directors, and the CEO's tenure all exceed .92. Individual correlations between the interaction terms are also typically very high. The resulting multicollinearity has the effect of increasing the standard errors of the coefficients and restricting the power of the statistical test of hypotheses. Multicollinearity however does not bias the estimate. It may increase the failure to reject the null hypotheses in those cases when the true effect differs from the null hypothesis. Given the existence of multicollinearity in the data, a statistical significance level of .10 will be chosen for hypothesis testing and model specification.

Table 2

Pearson Correlation Coefficients

Variables	Succession	Tenure	ROA	Market Return	Age	Time Trend
Succession	1.000	—	—	—	—	—
Tenure	0.007	1.000	—	—	—	—
ROA	-0.061	0.092	1.000	—	—	—
Market Return	-0.002	0.015	0.010	1.000	—	—
Age	0.108	0.476	0.062	-0.020	1.000	—
Time Trend	0.051	-0.077	-0.050	0.007	-0.055	1.000
Size (Log of Employees)	0.015	-0.010	0.121	-0.026	0.064	-0.012
Founder	-0.055	0.052	0.060	0.004	0.186	-0.156
Prior Board Tenure (Log)	0.046	-0.370	0.075	-0.010	-0.006	0.054
Prop. Outside Directors	0.000	-0.193	-0.070	-0.008	-0.006	0.235
Prop. Dir. Appointed	-0.004	0.764	0.012	0.013	0.253	-0.123
Size of Board	0.038	-0.158	0.067	-0.038	0.156	-0.106
Interaction of ROA with:						
Tenure	-0.061	0.089	0.996	0.110	0.065	-0.057
Founder	-0.030	0.000	0.362	0.058	-0.033	-0.022
Prior Board Tenure (Log)	-0.084	0.024	0.696	0.073	0.071	0.042
Prop. Outside Directors	-0.052	0.083	0.958	0.102	0.074	-0.042
Prop. Dir. Appointed	-0.051	0.074	0.922	0.105	0.026	0.061
Size of Board	-0.068	0.062	0.930	0.109	0.065	0.001

Table 2 (Continued)

Pearson Correlation Coefficients

Variables	Size	Founder	Prior Board Tenure	Prop. Outside Directors	Prop. Directors. App.	Size of Board
Size (Log of Employees)	1.000	—	—	—	—	—
Founder	-0.247	1.000	—	—	—	—
Prior Board Tenure (Log)	0.294	-0.554	1.000	—	—	—
Prop. Outside Directors	0.180	-0.328	0.135	1.000	—	—
Prop. Dir. Appointed	-0.270	0.551	-0.461	-0.212	1.000	—
Size of Board	0.588	-0.334	0.322	0.320	-0.322	1.000
Interaction of ROA with:						
Tenure	0.036	0.057	0.081	-0.064	0.006	0.077
Founder	-0.004	0.052	-0.035	-0.045	0.028	-0.021
Prior Board Tenure (Log)	0.073	-0.003	0.075	-0.005	-0.053	0.051
Prop. Outside Directors	0.116	0.056	0.091	-0.069	-0.001	0.068
Prop. Dir. Appointed	0.096	0.056	0.031	-0.073	-0.017	0.037
Size of Board	0.086	0.056	0.097	-0.086	-0.006	0.031

Variables	ROA X Tenure	ROA X Founder	ROA X Prior Tenure	ROA X Prop. Out. Dir.	ROA X Prop. Dir. App.	ROA X Size of Board
ROA X Tenure	1.000	—	—	—	—	—
ROA X Founder	0.336	1.000	—	—	—	—
ROA X Prior Tenure	0.692	0.009	1.000	—	—	—
ROA X Prop. Out. Dir.	0.961	0.256	0.691	1.000	—	—
ROA X Prop. Dir. Appt.	0.926	0.437	0.539	0.870	1.000	—
ROA X Size of Board	0.915	0.332	0.737	0.919	0.798	1.000

RESULTS

Table 3 presents the results of the hazard rate model of CEO succession. Six alternative model specifications are presented. Model 1 presents the baseline model, which includes return on assets (adjusted for industry average), all the control variables, and the effects of tenure. Models 2-5 successively add both the main effects and interaction effects of variables hypothesized to interact with economic performance. Model 6 presents the full model, which includes all variables that have achieved a .10 level of significance in previous models. If an interaction effect is included, so is the corresponding main effect. Given the large number of interaction effects with economic performance, multicollinearity is likely to limit the power of the test when all variables are included in the full model.

Model 1 shows a negative coefficient for return on assets, consistent with a net effect of economic adversity leading to CEO succession. This effect is statistically significant at the .01 level. The variable age is positive and statistically significant at the .01 level, consistent with the expectation that the rate of CEO succession increases with age. The variable time trend is positive and statistically significant at the .05 level. This implies that the rate of CEO succession has shown an increasing trend over the period 1960-1990. The size of the age and time trend effects and their statistical significance are stable across all the alternative specifications of the hazard rate model. The size of the firm has no statistically significant effects in the model.

The coefficient for the effect of tenure is positive and statistically significant at the .01 level in Model 1, as it is in all subsequent models. Hypothesis 1b, that the length of tenure increases the rate of CEO succession receives clear support, while Hypothesis 1a is rejected.

Table 3
Maximum Likelihood Estimates of the Hazard Rate of CEO Succession

Model	1	2	3	4	5	6
Constant	-6.271***	-6.397***	-6.268***	-6.172***	-6.512***	-6.574***
	(0.836)	(0.838)	(0.858)	(0.843)	(0.887)	(0.885)
Age	0.038***	0.039***	0.038***	0.038***	0.040***	0.039***
	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)
Time Trend	0.020**	0.021**	0.020**	0.022**	0.022**	0.022**
	(0.009)	(0.009)	(0.009)	(0.008)	(0.009)	(0.009)
Log of	0.014	0.014	0.013	0.021	0.008	-0.006
Employees	(0.040)	(0.041)	(0.041)	(0.041)	(0.048)	(0.049)
Founder	-0.724***	-0.701***	-0.702***	-0.770***	-0.695***	-0.645***
	(0.217)	(0.237)	(0.221)	(0.220)	(0.223)	(0.240)
ROA	-0.014***	0.003	-0.035**	-0.017	0.014	0.016
	(0.004)	(0.010)	(0.013)	(0.019)	(0.017)	(0.017)
Log of Prior	- - -	0.029	- - -	- - -	- - -	0.041
Board Tenure		(0.070)				(0.087)
Log of Prior	- - -	-0.015***	- - -	- - -	- - -	-0.010*
Tenure X ROA		(0.005)				(0.006)
Founder	- - -	-0.035	- - -	- - -	- - -	- - -
X ROA		(0.026)				
Proportion of	- - -	- - -	-0.229	- - -	- - -	- - -
Directors Appt.			(0.363)			
Proportion Dir.	- - -	- - -	0.023	- - -	- - -	- - -
Appt. X ROA			(0.015)			
Prop. Outside	- - -	- - -	- - -	-0.461	- - -	- - -
Directors				(0.400)		
Prop. Outside	- - -	- - -	- - -	0.007	- - -	- - -
Dir. X ROA				(0.034)		
Number of	- - -	- - -	- - -	- - -	0.003	0.003
Directors					(0.026)	(0.026)
Number of	- - -	- - -	- - -	- - -	-0.005**	-0.003
Dir. X ROA					(0.002)	(0.003)
Tenure	1.107***	1.111***	1.172***	1.104***	1.094***	1.109***
	(0.091)	(0.093)	(0.128)	(0.091)	(0.091)	(0.093)
Chi-Square	293.27	302.07	296.06	294.70	298.14	302.20
d.o.f.	6	9	8	8	8	10
Events	225	225	225	225	225	225

* .10 level **.05 level

Standard Error in Parenthesis

The results show a positive duration effect of CEO tenure, even after controlling for CEO age and for time trend. This provides the first evidence against the institutionalization of power model, and in favor of that of circulation of power. Rather than increasing their power and their ability to maintain their jobs over time, the positive duration effect shows that as the CEO's tenure increases, the CEO's ability to maintain his position decreases. This is consistent with both increased obsolescence of the CEO and contestation of his power. Opposition to the CEO increases over time, as he is unable to satisfy the demands of the organization and its diverse constituents, leading to an increase in the rate of CEO succession.

A positive effect for CEO tenure on CEO succession was also found by Puffer and Weintrob (1991). Their sample covered only succession events when the CEO's age was less than 64, but no additional control for age was put in place. Puffer and Weintrob treated tenure as a control variable and attributed the positive tenure effect on succession to the effect of CEOs getting closer to retirement age. The effects in the current study hold even after controlling for age and calendar time, consistent with a view that the CEO's power is impermanent and contestable. Given the finding of stability in CEO's reactions to environmental change (Miller, 1991), increased tenure indicates increased obsolescence and decreased ability to face the environmental contingencies facing the corporation. This obsolescence decreases the CEO's power and decreases his opportunities for holding on to his position.

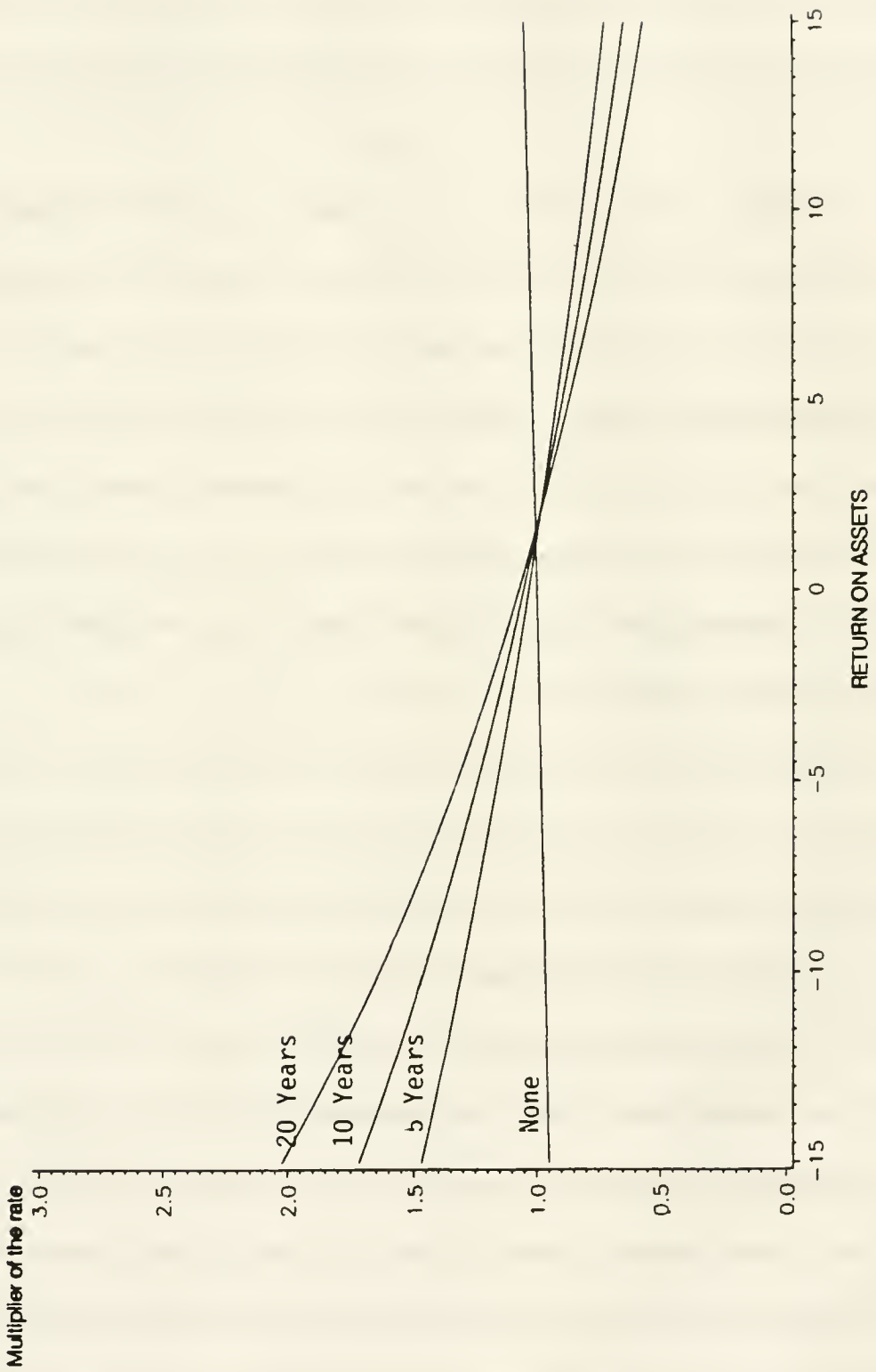
Hypothesis 2b is supported in Model 2 at the .01 levels of significance. The interaction effect of prior board tenure and performance is negative, showing that poor economic performance has larger effects when CEOs have longer board tenures. The main effect of prior board tenure is to increase the rate of succession, but this effect is not statistically significant.

The main effect of return on assets is now positive, but is not statistically significant. The interaction effect of founder and return on assets is negative, showing that founders are more immune to poor performance effects than those with no prior board experience, but this effect is also not statistically significant.

The effects of prior board experience on the rate of CEO succession are shown graphically in Figure 1. The four curves correspond to four levels of board experience: none, 5 years, 10 years, and 20 years. The curves measure the combined effects of three variables in Model 2: return on assets, prior board experience and the interaction of these two variables. These effects are measured independently of other variables. The horizontal axis measures the multiplier of the hazard rate of CEO succession. Note that the curve for no prior board experience is upward sloping, corresponding to decreased succession under poor performance. The remaining curves show a downward slope, with the effects of economic adversity having a greater impact on succession the longer the CEO's prior board experience.

Prior board experience, rather than increasing the CEO's power and making him more immune from the effects of poor performance (i.e., Hypothesis 2a), is more likely to lead to a greater susceptibility to the effect of economic adversity (Hypothesis 2b). CEOs may suffer from a *liability of experience*, where greater prior board tenure is likely to lead to a larger number of enemies, and more CEO succession under conditions of adversity. This result leads credence to the obsolescence explanation that underlies the model of circulation of power. Prior board tenure serves as a measure of the obsolescence of the CEO. CEOs with more extensive board tenure are more likely to continue the policies and programs of the corporation instituted while they were members of the board, and may be less receptive to organizational change. According

Figure 1


Effects of Return on Assets and Prior Board Experience
on the Rate of CEO Succession
Multiplier of the rate
3.0
2.5
2.0
1.5
1.0
0.5
0.0
20 Years
10 Years
5 Years
None
-15
-10
-5
0
5
10
15
RETURN ON ASSETS

to Model 2, the negative effects of prior board tenure and obsolescence on CEO succession are more likely to be felt under conditions of poor economic performance. The interaction effects of prior board tenure and return on assets remains negative in Model 6, with a significance level of .10.

The directions of the coefficients in Model 3 are consistent with Hypothesis 3, but the results are not statistically significant. The estimated coefficients show that the proportion of directors appointed under the CEO's tenure decreases the rate of CEO succession, as predicted by the institutionalization of power model. The positive coefficient for its interaction with return on assets, shows that the effect of poor performance is dampened. The size of the coefficient is approximately 2/3 the size of the main effect of economic performance. This means that when CEOs have appointed all the directors under their tenure, the negative effects of performance on CEO succession are reduced by 2/3.

Boeker (1992) tested a similar hypothesis on the interaction between board appointments and performance (measured in terms of decrease in sales) in a study of CEO dismissals in semiconductor companies and also found no statistically significant effects. Boeker did find, however, that a significant effect existed with respect to the proportion of inside directors appointed. Boeker argued that board loyalty may be especially intense when board members appointed are insiders. Wade, O'Reilly and Chandratat (1990) in their study of golden parachutes, found that the proportion of outside board members appointed under the CEO's tenure was positively related to the incidence of golden parachutes, arguing that this was due to the social influence of CEO's over outside board appointments. One potential reason for the lack of statistical significance of the measure of proportion of director's appointed, may be that CEOs

may have more influence over insiders (as in Boeker's results), or on outsiders (as in Wade et. al.). To test for these alternative hypotheses, measures of proportion of inside board members appointed under the CEO's tenure, and of proportion of outsiders appointed were recorded both as main effects and as interaction effects with return on assets.

The results of these alternative hypotheses are presented as Model 3a, 3b in Table 4, and compared with the original results of Model 3. The variables all show that the main effects of both inside board appointments and of outside board appointments are to reduce the rate of succession, and the interaction effects are positive, so that the greater the board loyalty the more limited will be the effect of adversity on increasing the rate of succession. But, like in the case of the original measure of total proportion of board members appointed, neither the main nor the interaction effects are statistically significant. Because Boeker's study only covers dismissals and his sample applies to only one industry, the results are not strictly comparable. One possibility is that while board appointments may in general increase board loyalty and decrease the rate of succession, there may be sufficient exceptions to this process to create large standard errors in the coefficients. The loyalty of inside board members appointed by the CEO may, for example, help limit the number of dismissals, but similar effects may not hold for other forms of CEO succession. Another factor that may decrease the significance of this effect may be due to the escalation of commitment (Staw, 1976) of board members not appointed to by the CEO, who participated in the original selection of the CEO. If the process of escalation of commitment by board members who participated in the CEO's selection is simultaneously at work with that of board loyalty, the two forces could cancel each other. In any case, the evidence that the CEO can

Table 4

Maximum Likelihood Estimates of the Hazard Rate of CEO Succession:

Effects of Proportion of Inside vs. Outside Directors Appointed

Model	3	3a	3b
Constant	-6.268***	-6.287***	-6.241***
	(0.858)	(0.848)	(0.852)
Age	0.038***	0.039***	0.038***
	(0.008)	(0.008)	(0.008)
Time Trend	0.020**	0.020**	0.020**
	(0.009)	(0.008)	(0.009)
Log of	0.013	0.014	0.013
Employees	(0.041)	(0.041)	(0.040)
Founder	-0.702***	-0.714***	-0.698***
	(0.221)	(0.219)	(0.220)
ROA	-0.035**	-0.044**	-0.029**
	(0.013)	(0.019)	(0.011)
Proportion of Directors	-0.229	- - -	- - -
Appointed under CEO	(0.363)		
Proportion Directors	0.023	- - -	- - -
Appointed.X ROA	(0.015)		
Proportion of Inside Directors	- - -	-0.163	- - -
Appointed under CEO		(0.287)	
Proportion of Inside Directors	- - -	0.032	- - -
Appointed X ROA		(0.021)	
Proportion of Outside Directors	- - -	- - -	-0.266
Appointed under CEO			(0.302)
Proportion of Outside Directors	- - -	- - -	0.018
Appointed.X ROA			(0.012)
Tenure	1.172***	1.146***	1.189***
	(0.128)	(0.105)	(0.124)
Chi-Square	296.06	295.96	296.35
d.o.f.	8	8	8
Events	225	225	225

* .10 level ** .05 level *** .01 level

Standard Errors in Parenthesis

help perpetuate and institutionalize his power in the board through board appointments cannot be demonstrated in the current study.

Regarding Hypothesis 4, not only are the results on the proportion of outside directors not statistically significant in Model 4, but they are in the opposite direction from those predicted. Again I find little support for the model of institutionalization of the CEO's power. Outside directors do not reduce the power of the CEO, nor are they better able to respond to the interests of shareholders as predicted by agency model of the firm.

Hypothesis 5 receives support in Model 5, with the null hypothesis rejected at the .05 level. As the number of directors increases, the effects of economic adversity become more pronounced, as posited by the model of circulation of power. The main effect of board size is positive, so that larger boards lead to greater succession, but this effect is not statistically significant. CEOs with larger boards are faced with greater contestation, with the effect more likely to hold under conditions of poor economic performance The interaction effect of board size and economic performance retains the same sign in Model 6, but the null hypothesis can no longer be rejected.

Figure 2 shows graphically how the size of the board interacts with economic performance to affect the rate of succession. The five curves shown correspond to five selected board sizes: 3, 5, 10, 15, and 20 board members, respectively. The curve that corresponds to a board size of 3 is basically flat, so that CEOs facing very small boards are immune from the effects of economic adversity on their rates of succession. But as board size increase, the effects of economic adversity become quite noticeable.

Figure 2

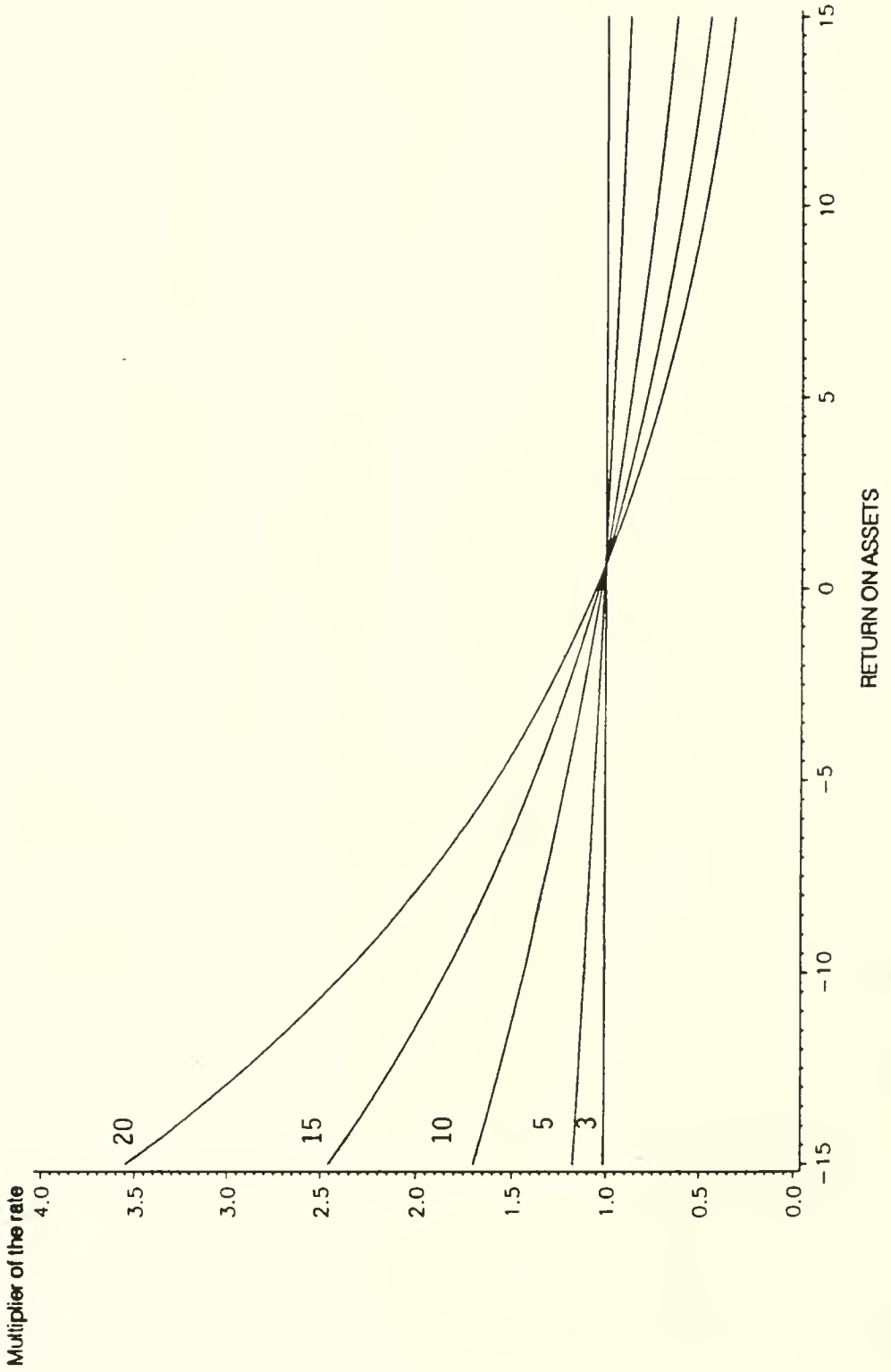

Effects of Return on Assets and Number of Directors
on the Rate of CEO Succession
Multiplier of the rate
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
20
15
10
5
3
−15
−10
−5
0
5
10
15
RETURN ON ASSETS

Table 5
Maximum Likelihood Estimates of the Hazard Rate of CEO Succession: Effects of Number of Inside vs. Outside Directors

Model	5	5a	5b
Constant	-6.512***	-6.961***	-6.308***
	(0.887)	(0.910)	(0.843)
Age	0.040***	0.036***	0.041***
	(0.009)	(0.009)	(0.009)
Log of	0.008	-0.001	0.036
Employees	(0.048)	(0.041)	(0.045)
Founder	-0.695***	-0.715***	-0.758***
	(0.223)	(0.217)	(0.222)
ROA	0.014	0.008	-0.002
	(0.017)	(0.011)	(0.011)
Number of Directors	0.003	- - -	- - -
	(0.026)		
Number of Directors	-0.005**	- - -	- - -
X ROA	(0.002)		
Number of Inside Directors	- - -	0.063*	- - -
		(0.037)	
Number of Inside Directors	- - -	-0.009**	- - -
X ROA		(0.004)	
Number of Outside Directors	- - -	- - -	-0.027
			(0.027)
Number of Outside Directors	- - -	- - -	-0.003
X ROA			(0.002)
Tenure	1.094***	1.109***	1.088***
	(0.091)	(0.090)	(0.091)
Chi-Square	298.14	301.30	296.00
d.o.f.	8	8	8
Events	225	225	225

* .10 level ** .05 level *** .01 level

Standard Errors in Parenthesis

In examining the effects of board size on CEO succession, we are implicitly assuming that the effect of an additional inside board member is equivalent to the effect of an additional outsider. Table 5 estimates hazard rate of CEO succession separating the effects of number of inside board members (Model 5a), the number of outside board members (Model 5b) and their interactions with the economic performance measure; Model 5c includes the effects of number of insider and number of outsider simultaneously. These are contrasted with the original Model 5, which includes the total size of the board and its interaction with economic performance.

The main effect of number of inside directors is positive and statistically significant at the .10 level in Model 5a, while the main effect of number of outside directors is negative and not statistically significant in Model 5b. The interaction effect of number of inside directors and return on assets is negative and statistically significant at the .05 level in Model 5a, while the interaction with number of outside directors is negative but not statistically significant in Model 5b. These results indicate that the contestation of power of board members is stronger and more likely to take place by other executive officers who function as rivals of the CEO and serve to limit his power. This result contradicts the long-standing assumption that inside board members serve as pawns of the CEO (Herman, 1981; Weisbach, 1988). Inside board members are more likely to limit the CEO's power and to contest it, particularly under conditions of economic adversity, rather than to uphold it.

Model 6 presents the combined effects of board size, prior board tenure and their interactions with economic performance, as well as the main effects of the CEO's tenure. Model 6 provides a statistically significant improvement in explanatory power over Model 1, at the .10 level, consistent with the view that the effects of economic adversity on CEO succession are mediated

by political processes. The effects of tenure on succession are positive and statistically significant at the .01 level, supporting the model of circulation. The interaction effects of prior board tenure remain statistically significant at the .10 level, also supporting the model of circulation. The effects of number of directors retains the same direction, but is no longer statistically significant. The results in Model 6 are broadly consistent with the circulation of power model and with the existence of obsolescence and contestation. Due to the existence of multicollinearity, the statistical results in Model 6 are not particularly strong. But the consistency of results in direction supporting the model of circulation and opposite to those predicted by the model of institutionalization of power lend credence to the interpretation that CEO's power is impermanent and contestable, and that political dynamics are best characterized by the circulation of CEOs.

Note that both the size and direction of the main effect for return on assets varies significantly across the various models estimated. The effects are statistically significant and negative in Models 1 and 3, negative, but not significant in model 4, and positive, but not statistically significant in Models 2, 5, and 6. This indicates that while for the average corporation the net effect of poor performance is a failure-induced change in the CEO, this relationship in fact masks a heterogeneous response to economic adversity that is mediated by the political dynamics within the corporation and its board of directors. The political dynamics within the corporation, as modeled by the circulation of power, serve to decouple the CEO's position from the effects of economic adversity.

CONCLUSIONS

This paper provides a theoretical and empirical contribution to the study of political dynamics, an area that has received limited attention in the past, and to the study of CEO succession. I develop a model of circulation of power, which invokes and builds upon earlier political theories of circulation of elites by Mosca, Pareto, and Michels, and apply it to the study of political dynamics in U. S. industrial corporations. I posit two mechanisms to account for circulation of CEOs: obsolescence and contestation. According to the model of circulation, CEOs are subject to a *liability of experience*, as greater familiarity with past practices and politics, increases both technical and political obsolescence, and increases the potential for contestation of the CEO's power. The model of circulation of power is contrasted and tested against the model of institutionalization, which had been previously formulated, but had been infrequently tested.

By focusing on political dynamics in an event-history analysis of CEO succession, this study permits us to explicate how the power of the CEO over the corporation and its board of directors becomes decoupled from the pressures of economic performance and, implicitly, from the firm's environmental contingencies. The results are consistent with the view that CEO succession is shaped by the dynamics of the CEO's power, and that these political forces change over the CEO's tenure. While for the average corporation, poor economic performance leads to an increased rate of CEO succession, this results in fact masks a heterogeneous response to economic adversity that is shaped by the political dynamics of the corporation.

None of the hypotheses derived from the institutionalization of power model were found to be statistically significant, and in those cases where the model of circulation of power offered the opposite prediction, the latter model was supported. The results of the models clearly

contradict the view that CEOs are, in general, able to institutionalize their power in the corporation, and that boards of directors are simply their pawns. A possible exception is the ability of CEOs to increase their power through board appointments, but this result was not statistically significant.

The results are more consistent with a view that the power of the CEO is contested and impermanent. The political dynamics within the corporation and its board is best characterized by the model of circulation of power. Strong support was found for obsolescence in the CEO's power, with a positive duration effect on the rate of CEO succession, as the power of the CEO decays over time. Obsolescence is associated with a political liability of experience, as CEOs may increase their enemies with increased experience, not only as CEOs, but during their prior tenure in the board of directors. The effects of contestation increase with the number of potential opponents within the board. Larger boards increase the possibilities for forging new political coalitions to challenge the coalition headed by the incumbent CEO. Of particular importance is the effects of the number of inside board members, who serve as potential contestants to the CEO's power and position, as sources of information and validation of the CEO's programs and positions, and as sources of social comparison in the board's evaluation of the CEO's effectiveness.

The effects of the number of inside board members on the rate of succession, and its interaction effects with economic adversity call into question long-standing assumptions that inside board members serve as pawns of the CEO, and that increasing the proportion of outside directors helps to limit the power of the CEO over the board. A large number of insiders in the board may be required for board members to have adequate information to evaluate the CEO's

explanations for the adequacy of the firm's performance. The small, net effects of performance on CEO succession suggest that the effects of adversity are not automatic, but are dependent on the perception by the board on whether the CEO's policies and capabilities are adequate for the task. Inside board members serve several functions that may increase CEO succession under adversity: they are readily-available candidates for the position, they possess intensive information on the company's operation, and when economic adversity is faced, their rivalry and opposition to the CEO may become manifest as contestants for his position.

The results of this study serve not only to highlight the significance of political dynamics in executive succession, but to challenge conventional assumptions and beliefs regarding the nature of those dynamics. Recent highly-publicized instances of CEO turnover in General Motors and IBM have been interpreted by the business press as indications of the need for an increased role for outside directors in corporate governance, particularly under conditions of economic adversity. As a crisis is faced by the corporation, outside directors meet in private and "decide" to remove the CEO. But such observations ignore contrary evidence, such as the removal of a CEO by an insider-dominated board in Dow Chemical (Vancil, 1987) and the unexplored role of inside directors in supplying information, serving as sources of comparison, and or contesting the CEO's position. The results of this study, while not definite, lead us to question the basis for assuming that outside board members are an effective control over the CEO's power, and lead us to look instead toward alternative explanations based on the CEO's obsolescence and the contestation of his power.

REFERENCES

Berle, Adolf, Jr., and Gardiner C. Means
1967 The Modern Corporation and Private Property. New York: Harcourt, Brace, and World.

Boeker, Warren
1989 "The development and institutionalization of subunit power in organizations." Administrative Science Quarterly. 34: 388-410.

1992 "Power and managerial dismissal: Scapegoating at the top." Administrative Science Quarterly. 37: 400-421.

Cyert, Richard M., and James G. March
1963 A Behavioral Theory Of The Firm. Englewood Cliffs, N.J.: Prentice-Hall.

Fama, Eugene. L., and Michael C. Jensen
1983 "Separation of ownership and control." Journal of Law and Economics. 26: 301-325.

Fizel, John L., Kenneth K. T. Louie, and Marc S. Mentzer
1990 "An economic, organizational and behavioral model of the determinants of CEO tenure." Journal of Economic Behavior and Organization. 14: 363-379.

Frederickson, James W., Donald C. Hambrick, and Sara Baumrin
1988 "A model of CEO dismissal." Academy of Management Review. 13: 255-271.

Herman, Edward S.
1981 Corporate Control, Corporate Power. Cambridge, U.K.: Cambridge University Press.

Hickson, D., C. R. Hinnings, C. A. Lee, R. E. , Schneck, and J. M. Pennings
1971 "A strategic contingencies theory of intraorganizational power." Administrative Science Quarterly. 19: 22-44.

Levitt, Barbara and James G. March
1988 "Organizational learning." Annual Review of Sociology. 14: 319-340.

Lorsch, Jay W.
1989 Pawns or potentates. Boston: Harvard Business School Press.

March, James G.
1962 "The business firm as a political coalition." Journal of Politics. 24: 662-678.

1966 "The power of power." In David Eaton, [Ed.] Varieties of Political Theory. New York: Prentice-Hall.

Meyer, John W., and Brian Rowan
1977 "Institutionalized organizations: Formal structure as myth and ceremony." American Journal of Sociology. 83: 340-363.

Michels, Robert
1962 Political parties. New York: The Free Press.

Miller, Danny
1991 "Stale in the saddle: CEO tenure and the mach between organization and environment." Management Science. 37: 34-52.

Morck, Randall, Andrei Shleifer, and Robert W. Vishny
1989 "Alternative mechanisms for corporate control." American Economic Review. 9: 842-852.

Pareto, Vilfredo
1968 "The Rise And Fall Of The Elites." Totowa, N.J.: The Bedminster Press.

Pfeffer, Jeffrey
1981 Power in organizations. Marshfield, Mass.: Pitman.

1992 Managing with power: Politics and influence in organizations. Boston: Harvard Business School Press.

Pfeffer, Jeffrey, and Gerald R. Salancik
1978 The external control of organizations. New York: Harper and Row.

Powell, Walter W., and Paul J. DiMaggio (Eds.)
1991 The New Institutionalism in Organizational Analysis. Chicago: The University of Chicago Press.

Puffer, Sheila. M., and Joseph B. Weintrop
1991 "Corporate performance and CEO turnover: The role of performance expectations." Administrative Science Quarterly. 36: 1-19.

Putnam, Robert D.
1976 The Comparative Study of Political Elites. Englewood Cliffs, N.J.: Prentice-Hall.

Salancik, Gerald R., and Jeffrey Pfeffer
1977 "Who gets power—and how they hold on to it: A strategic-contingency model of power." Organizational Dynamics. 5: 3-21.

Selznick, Philip
1957 Leadership in Administration. Evanston, Ill.: Row, Peterson.

Staw, Barry M.
1976 "Knee-deep in the big muddy: A study of escalating commitment to a chosen course of action." Organizational Behavior and Human Performance. 16: 27-44.

Tuma, Nancy B.
1980 Invoking Rate. Menlo Park, Calif.: SRI International.

Tuma, Nancy B., and Michael T. Hannan
1984 Social Dynamics: Models And Methods. Orlando: Fla.: Academic Press.

Tushman, Michael L., and Elaine Romanelli
1985 "Organizational evolution: A metamorphosis model of convergence and reorientation." Research in Organizational Behavior. 7: 171-222. Greenwich, Ct.: JAI Press.

Vancil, Richard M.
1987 Passing the Baton: Managing the Process of CEO Succession. Cambridge, Mass.: Harvard Business School Press.

Wade, James, Charles A. O'Reilly, and Ike Chandratat
1990 "Golden parachutes: CEOs and the exercise of social influence." Administrative Science Quarterly. 35: 587-603.

Weisbach, Michael S.
1988 "Outside directors and CEO turnover." Journal of Financial Economics. 20: 431-460.

Zajac, Edward J.
1990 "CEO selection, compensation, and firm performance: A theoretical interpretation and empirical analysis." Strategic Management Journal. 11: 217-230.

Zucker, Lynn G.
1977 "The role of institutionalization in cultural persistence." American Sociological Review. 42: 726-743.